

CLAIMS

1. A fired refractory shaped part, the structure of which
  - a) comprises at least 75 wt.% of a pre-fired refractory secondary material with a grain size up to 3 mm and
  - b) has a pore volume between 10 and 30% that, after firing of the shaped part, was at least partially filled with a carbon containing material, wherein
  - c) the carbon content, referred to the shaped part, amounts to > 3 wt.%.
2. The shaped part according to Claim 1, the secondary material of which is present in a grain size fraction  $d_{50}$  of < 1 mm.
3. The shaped part according to Claim 1 with an open pore volume between 20 and 30% before the filling with a material containing carbon.
4. The shaped part according to Claim 1, the carbon content of which amounts to > 5 wt.%.
5. The shaped part according to Claim 1, the secondary material of which comprises at least 90 wt.%  $ZrO_2$ .
6. The shaped part according to Claim 1, the secondary material of which comprises of stabilized, partially stabilized, pseudo-stabilized  $ZrO_2$  or mixtures thereof.
7. The shaped part according to Claim 1 with an open porosity between 4.5 and 7.5 vol.% after the filling with the material containing carbon and the subsequent tempering process.

8. The shaped part according to Claim 1, the structure of which comprises 5-25 wt.% of a refractory primary material.
9. The shaped part according to Claim 8, the primary material of which corresponds to the secondary material mineralogically, chemically or mineralogically and chemically.
10. The shaped part according to Claim 8 or 9, the primary material of which is present in a grain size fraction of  $< 0.3$  mm.
11. The shaped part according to Claim 1, the secondary material of which is a recycled material.
12. The shaped part according to Claim 1, the pore distribution of which is such that at least two maximums result if pore diameters are plotted (logarithmically) as a function of relative open porosity or pore distribution.
13. The shaped part according to Claim 12, wherein a first maximum lies below  $5\text{ }\mu\text{m}$  and a second maximum lies above  $8\text{ }\mu\text{m}$ .